tories, etc. and UGC, CSIR and other funding agencies, not to make an appointment for a teaching or research position or entertain a research proposal for the award of funds unless the candidate has published at least two out of say five research papers in Indian journals. One can then expect the level of Indian research to be lifted to a threshold for being competitive within about ten years. This scheme is likely to cut down the

skewed, repetitive and aimless research too. However, a greater effort is also needed to restrict and standardize the process of admission to Ph D research to improve the overall scenario of Indian research.

The Government also has a role to encourage contributions from competitive workers to Indian journals, in providing funds to certain selected journals specifically for making awards to the best paper published in a year in a particular discipline. These two suggestions if implemented as such or in a modified form, are likely to change the scenario of the quality of research in the country in due course of time.

Y. K. GUPTA

J/5, Phase II, Shivalik Nagar, Hardwar 249 403, India

## The bioinformatics industry

I am informally associated with a private 'bioinformatics' institute and I read with interest the recent editorial 'Bioinformatics: Blowing up a balloon' (Curr. Sci., 2002, 82, 1189-1190). Most of the points are well-taken. However there is another, perhaps more positive side to this affair. First, not all students who attend these institutes do so because it will get them an immediate job. Many, if not most, are grateful if only an honest attempt is made to expose them to the topic and to demystify some of the associated jargon. And, if you doubt that they are willing to pay large amounts just for this, we must remember that there is an 'entertainment' as well as 'prestige' aspect associated with it, and people are willing to pay for this. Secondly, American commercial history, particularly, is replete with examples of 'industries' and large companies being invented almost overnight and being run in a sustained and hugely profitable manner, based apparently on nothing at all. Pepsi and Coca Cola are examples that spring immediately to the mind, but even Bill Gates and his Microsoft apparently created themselves out of thin air. Marketing is all, and maybe bioinformatics will turn out to be another such industry. And finally, even if you consider job prospects, the students

who come out of the already established teaching shops, no matter how bad, will probably find placements in the numerous colleges that are starting to offer M Sc, B Tech, M Tech, and other degrees in bioinformatics. In the short run therefore, these establishments and their students will do well. And to quote Keynes, in the long run we are all dead anyway.

N. GAUTHAM

Department of Crystallography & Biophysics, University of Madras, Chennai 600 025, India e-mail: crystal@giasmd01.vsnl.net.in

## Collection of data on microbial resources of India

India is endowed with a rich microbial diversity, which unfortunately, has not been adequately enumerated and catalogued. Many laboratories in India over the years have been working on Indian microflora, and have described new genera and species or have explored their biotechnological potentials. Data on Indian microbial resources have remained mostly with the investigators and in papers published by them. It is not known how many of them have been conserved *ex situ*. As a result, we do not have systematic information about the microbial diversity of our country.

A programme has been initiated to collect, collate and digitize data available on Indian microbial resources. The programme is supported by the Department of

Biotechnology, Government of India under the aegis of the National Bioresources Development Board. Twenty-two investigators from universities and research institutes spread over the whole country are involved in this endeavour. They will approach researchers in universities/colleges/institutes for collection of data on the microorganisms they have in their laboratories, and their published works. Data on microorganisms (bacteria, fungi, algae and viruses) will be collected in a uniform format (can be downloaded from http://imtech.res.in/mtcc/mdiv/).

This is a challenging but an essential task for safeguarding our national interest. We solicit active cooperation of the readers in this highly important national endeavour. It may be noted that only the

data will be collected and not the strains. You may contact any of us with your suggestions and enquiries.

S. Shivaji, CCMB, Hyderabad (e-mail: shivas@gene.cccmbindia.org); C. Shekhar Nautiyal, NBRI, Lucknow (e-mail: nautiyalnbri@yahoo.com); B. N. Ganguli, Agharkar Research Institute, Pune (e-mail: bganguli@vsnl.com); AMAL K. Paul, University of Calcutta (e-mail: akpaul@cal3.vsnl.net.in); Alok Adholeya, Teri, New Delhi; G. P. S. Raghava, Institute of Microbial Technology, Chandigarh (e-mail: raghava@imtech.res.in); T. Chakrabarti, Institute of Microbial Technology, Chandigarh (e-mail: tapan@imtech.res.in)